TECHNICAL NOTES

LAKE STATES FOREST EXPERIMENT STATION
U.S. DEPARTMENT OF AGRICULTURE · · FOREST SERVICE

No. 426

1954 Forest Tree Seed Crop Fair in Lake States

In 1954 forest trees in the Lake States produced seed crops generally equal to or a little better than those of any year since 1950, according to observations made at field centers of the Lake States Forest Experiment Station. In general, conifers had fair to good crops in northern Minnesota and northeastern Wisconsin and poor to fair crops in Michigan. Seed crops of balsam fir and tamarack were poorer than those of other species. Among the hardwood species, basswood produced a bumper seed crop; the aspens, bur oak, and northern red oak produced good crops in some localities; and the other species had crops ranging from failures to fair. (See table on back of sheet.)

In northern Minnesota all conifers produced good seed crops in the central and western areas, but were mostly fair in the eastern areas except for balsam fir which had failure to poor crops. There was a good crop of bur oak acorns, but there were crop failures for northern red and northern pin oaks. Quaking aspen had poor and yellow birch poor to fair seed crops. Seed production was somewhat spotty to the west and scattered to the east.

In northeastern Wisconsin basswood had a bumper seed crop; good crops were produced by red pine, jack pine, Scotch pine, white spruce, Norway spruce, red maple, and the aspens. Black spruce, northern white-cedar, sugar maple, yellow birch, and white ash produced fair seed crops. Balsam fir and tamarack had crop failures, and the other species had poor crops. Seed production was rather spotty for most species.

In central Upper Michigan eastern hemlock was the only species with a good seed crop. White pine, red maple, beech, and black ash had poor crops. The rest of the conifers along with sugar maple, yellow birch, and American elm had fair seed crops.

In the Lower Peninsula of Michigan red oak was the only species with a good seed crop, and its distribution was somewhat spotty. Fair crops were produced by red maple, American elm, northern pin oak, and black oak. All conifers, and sugar maple, beech, and white oak had poor crops.

Seed collectors usually are interested chiefly in the pines and spruces. For them 1954 was generally a good year in northern Minnesota and northeastern Wisconsin, but poor in Michigan. The seed supply for establishing natural reproduction varies by species and locality, but is generally a little better than for any year since 1950. Except for Wisconsin, the supply of acorns for winter wildlife food is a little better than in the past 3 years.

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PAUL O. RUDOLF, Forester

MAINTAINED AT ST. PAUL 1, MINNESOTA, IN COOPERATION WITH THE UNIVERSITY OF MINNESOTA

Forest tree seed crops in the Lake States, 1954

Species	Estimated percentage of a full crop [1] in--			
	Northern Minnesota	Northeastern Wisconsin	Central Upper Michigan	Lower Peninsula Michigan
Red pine	50-75	75	[2]--	25
Eastern white pine	25-75	25	25	25
Jack pine	50-75	75	--	--
Scotch pine	--	75	--	--
White spruce	50-75	75	50	25
Black spruce	50-75	50	50	--
Norway spruce	--	75	--	--
Balsam fir	7-75	7	50	--
Eastern hemlock	--	25	75	--
Northern white-cedar	75	50	50	--
Tamarack	--	7	--	--
Sugar maple	--	50	50	25
Red maple	--	75	25	50
American beech	--	--	25	25
Basswood	--	95	--	--
Yellow birch	25-50	50	50	--
Paper birch	--	25	--	--
Quaking aspen	25	75	--	--
Bigtooth aspen	--	75	--	--
American elm	--	--	50	50
White ash	--	50	--	--
Black ash	--	25	25	--
Bur oak	75	--	--	--
Northern pin oak	7	--	--	50
Black oak	--	--	--	50
Northern red oak	7	25	--	75
White oak	--	--	--	25

1/ Percentages of full crop are classified as follows:

0- 15, failure
16- 35, poor
36- 60, fair
61- 90, good
91-100, bumper

2/ (--) signifies no report on this species.